

**UNITED STATES DISTRICT COURT
FOR THE EASTERN DISTRICT OF TEXAS
MARSHALL DIVISION**

COBBLESTONE WIRELESS, LLC,

Plaintiff,

v.

CISCO SYSTEMS, INC.

Defendant.

Case No. 2:23-cv-00454
(Lead Case)

COBBLESTONE WIRELESS, LLC,

Plaintiff,

v.

HEWLETT PACKARD
ENTERPRISE COMPANY; ARUBA
NETWORKS, LLC.

Defendants.

Case No. 2:23-cv-00457
(Member Case)

PLAINTIFF'S OPENING CLAIM CONSTRUCTION BRIEF

TABLE OF CONTENTS

I.	INTRODUCTION	1
II.	ARGUMENT	1
A.	Preamble: “A method of transmitting information in a wireless communication channel comprising...” (Claim 1).....	1
B.	“first center frequency / second center frequency” (claim 1)	6

TABLE OF AUTHORITIES

Cases

<i>Baldwin Graphic Sys., Inc. v. Siebert, Inc.</i> , 512 F.3d 1338 (Fed. Cir. 2008).....	3
<i>Baran v. Med. Device Techs., Inc.</i> , 616 F.3d 1309 (Fed. Cir. 2010).....	11
<i>Choon’s Design, LLC v. IdeaVillage Prods. Corp.</i> , 776 Fed App’x 691 (Fed. Cir. 2019).....	13
<i>Convolve, Inc. v. Compaq Computer Corp.</i> , 812 F.3d 1313 (Fed. Cir. 2016).....	4
<i>Corning Glass Works v. Sumitomo Elec. U.S.A., Inc.</i> , 868 F.2d 1251 (Fed. Cir. 1989).....	3
<i>Eli Lilly & Co. v. Teva Pharms. Int’l GmbH</i> , 8 F.4th 1331 (Fed. Cir. 2021)	2
<i>Haddad v. United States</i> , 164 Fed. Cl. 28 (2023)	11
<i>Harari v. Lee</i> , 656 F.3d 1331 (Fed. Cir. 2011).....	5
<i>In re Abbott Diabetes Care Inc.</i> , 696 F.3d 1142 (Fed. Cir. 2012).....	13
<i>In re Varma v. IBM Corp.</i> , 816 F.3d 1352 (Fed. Cir. 2016).....	4
<i>Irdeto Access, Inc. v. Echostar Satellite Corp.</i> , 383 F.3d 1295 (Fed. Cir. 2004).....	13
<i>Kinetic Concepts, Inc. v. Blue Sky Med. Grp., Inc.</i> , 554 F.3d 1010 (Fed. Cir. 2009).....	12
<i>Medrad, Inc. v. MRI Devices Corp.</i> , 401 F.3d 1313 (Fed. Cir. 2005).....	12
<i>On Demand Mach. Corp. v. Ingram Indus.</i> , 442 F.3d 1331 (Fed. Cir. 2006).....	3
<i>Phillips v. AWH Corp.</i> , 415 F.3d 1303 (Fed. Cir. 2005).....	12
<i>VirnetX, Inc. v. Cisco Sys., Inc.</i> , 767 F.3d 1308 (Fed. Cir. 2014).....	11, 12
<i>Vizio, Inc. v. Int’l Trade Comm’n</i> , 605 F.3d 1330 (Fed. Cir. 2010).....	3

I. INTRODUCTION

The single asserted patent in this case, U.S. Patent No. 7,924,802 (the “’802 Patent”), discloses innovative systems and methods for transmitting information in a wireless channel using separate first and second center frequencies. This stands in contrast to previous conventional systems that used only a single “center frequency (or modulation frequency)” in “one or more transmission channels... from the transmitter to the receiver.” Ex. 1 (’802 Patent) at 1:12-40, cl. 1. Here, Plaintiff seeks two specific claim constructions to confirm the plain and ordinary meaning of the claim language in light of the patent specification. Plaintiff previously presented these constructions to the Patent Trial and Appeals Board in response to invalidity theories that had incorrectly interpreted the relevant terms. Specifically, Plaintiff argued that the preamble is limiting and refers to a single wireless communication channel in response to IPR2024-00606 filed by a third party. Additionally, in response to IPR2024-00707 filed by Defendants, Plaintiff argued that “first center frequency / second center frequency” should be interpreted as “[t]he frequency of the carrier that the baseband signal is upconverted to”. The Court should adopt Plaintiff’s proposed constructions and confirm that the patent claims have their plain and ordinary meaning in light of the specification.

II. ARGUMENT

A. Preamble: “A method of transmitting information in a wireless communication channel comprising...” (Claim 1)

Plaintiff’s Proposed Construction	Defendants’ Proposed Construction
The preamble is limiting as to “in a wireless communication channel”	No construction necessary

The phrase “in a wireless communication channel” in claim 1’s preamble is necessary in imparting life and meaning to the claim. In particular, the preamble clarifies that the patent claim

concerns transmissions in a single wireless communication channel, rather than any two transmissions at different frequencies. This intent is consistently supported by the '802's specification, which repeatedly explains that the invention is regarding a specific method within "a [wireless] communication channel." *See, e.g.*, Ex. 1 ('802 Patent) Abstract ("Embodiments of the present invention transmit signals simultaneously over *a communication channel* at different RF center frequencies"); 1:61-63 ("In one embodiment, the present invention includes a method of transmitting information in *a wireless communication channel*"); *see also* 2:45-47; 6:60-62; 10:63-66; 12:14-15. In fact, the '802 provides specific formulas to recover information based on the response of the different frequency ranges within a single communication channel. *Id.*, 13:21-23 ("[h_1, h_2, \dots, h_N] represents *the channel response* over band frequency f_1 . [g_1, g_2, \dots, g_N] represents *the channel response* over band frequency f_2 ").

In accord, the claim recites a method of transmitting information "in a wireless communication channel" that comprises transmitting information across two frequency ranges as claimed. Ex. 1 ('802 Patent) cl. 1. The preamble's limiting role aligns with the Federal Circuit which has ruled that, "statements of intended purpose in methods of using apparatuses," such as this, "ha[ve] tended to result in a conclusion that such preamble language is limiting." *Eli Lilly & Co. v. Teva Pharms. Int'l GmbH*, 8 F.4th 1331, 1341 (Fed. Cir. 2021). Without the preamble's limitation, the claim does not recite a complete structure, and would instead indiscriminately cover all transmission of information across two frequency ranges, diverging from the invention's intended scope. The Federal Circuit has found similar preambles to be limiting:

To read the claim in light of the specification indiscriminately to cover all types of optical fibers would be divorced from reality. The invention is restricted to those fibers that work as waveguides as defined in the specification, which is not true with respect to fibers constructed with the limitations of paragraphs (a) and (b) only.

Thus, we conclude that the claim preamble in this instance does not merely state a purpose or intended use for the claimed structure.

Corning Glass Works v. Sumitomo Elec. U.S.A., Inc., 868 F.2d 1251, 1257 (Fed. Cir. 1989); *see also Vizio, Inc. v. Int’l Trade Comm’n*, 605 F.3d 1330, 1341 (Fed. Cir. 2010) (finding the preamble to be limiting where “a construction that required only receipt and storage of the channel map information, and not the ability to decode using that information, could effectively broaden the claims to cover all devices and methods of decoding an A/65 compliant digital broadcast.”).

In fact, the Federal Circuit has reversed a district court holding that a similar preamble was not limiting. In *On Demand*, the district court had held that the preamble’s recitation of “high speed manufacture” did not limit the claims to require that the claimed steps “must take place within a short period of time.” *On Demand Mach. Corp. v. Ingram Indus.*, 442 F.3d 1331, 1343 (Fed. Cir. 2006). In reversing the district court, the Federal Circuit explained that “the preamble in this case necessarily limits the claim, in that it states the framework of the invention,” and “the entirety of the claim implements the preamble’s high speed manufacture of a single copy.” *Id.*, 1343-1344. Similarly, in this case, the preamble’s “in a wireless communication channel” states the framework of the invention, and the context in which the specifically claimed transmission of information must take place. Therefore, “in a wireless communication channel” is limiting.

And although further construction of “in a wireless communication channel” is not necessary, Plaintiff notes that, unlike the familiar situation where the article “a” appears in the body of a “comprising” claim and thus means “one or more,” here “a wireless communication channel” clearly refers to a single wireless communication channel. The indefinite article “a” generally means “one or more” only “in open-ended claims containing the transitional phrase ‘comprising.’” *Baldwin Graphic Sys., Inc. v. Siebert, Inc.*, 512 F.3d 1338, 1342 (Fed. Cir. 2008). In other words, when a claim’s preamble concludes with “comprising,” the body of the claim is

open-ended because anything that follows “comprising” simply must be included. For instance, if a claim begins with a preamble concluding with “comprising” and the body of the claim requires, *e.g.*, “a processor,” the claim would, generally, encompass a system with more than one processor.

That principle, however, does not apply where the article “a” appears before “comprising.” *Convolve, Inc. v. Compaq Computer Corp.*, 812 F.3d 1313, 1321 (Fed. Cir. 2016) (finding that “a process” requires a single processor because the claim recites “‘a processor’ in the preamble before recitation of ‘comprising’ ...”). The preamble here, again, requires “[a] method of transmitting information in a wireless communication channel comprising:” Here, “a wireless communication channel” appears before the word “comprising.” Consequently, the claimed method must be performed within “*a* wireless communication channel,” not multiple wireless communication channels.¹

Because the case law that “a” means “one or more” does not apply in this specific situation, the Court should apply the plain and ordinary meaning of “a”; *i.e.*, “one.” As the Federal Circuit has held, for instance, “a statistical analysis request” means “one request”:

The error of Interpretation 1 is plain from the claim phrase at issue. The phrase requires “a statistical analysis request corresponding to two or more selected investments.” [citation]. ***That language on its face excludes Interpretation 1. A single request must correspond to at least two investments.***

In re Varma v. IBM Corp., 816 F.3d 1352, 1362 (Fed. Cir. 2016). As *Varma* explained, even though the claim may permit the existence of more than one “statistical analysis request,” there must be one request that meets the claimed limitations:

The Board also cited the indefinite article “a” before “statistical analysis request” to support Interpretation 1. But while “a” sometimes is non-restrictive as to

¹ This is, of course, not to say that the claim would not cover a system wherein more than one wireless communication channel independently practice the entirety of the claimed method.

number, permitting the presence of more than one of the objects following that indefinite article, context matters even as to whether the word has that meaning. *See Harari v. Lee*, 656 F.3d 1331, 1341 (Fed. Cir. 2011). ***And here the question is not whether there can be more than one request in a claim-covered system: there can. Rather, the question is whether “a” can serve to negate what is required by the language following “a”: a “request” (a singular term) that “correspond[s]” to “two or more selected investments.” It cannot.*** For a dog owner to have “a dog that rolls over and fetches sticks,” it does not suffice that he have two dogs, each able to perform just one of the tasks. In the present case, no matter how many requests there may be, no matter the variety of the requests the system may receive, the system must be adapted to receive a request that itself corresponds to at least two investments.

Id., 1363; *see also Harari v. Lee*, 656 F.3d 1331, 1341 (Fed. Cir. 2011) (holding that “a bit line” requires a single bit line). Here too, the limitation requires “a wireless communication channel” (a singular term) wherein the claimed method is performed. Like the hypothetical dog in *Verma*, it would not suffice to have a portion of the claimed method performed in one “wireless communication channel” and another portion of the claimed method performed in a different “wireless communication channel.”

Moreover, the claim language and specification reinforce the plain meaning and support the conclusion that the claimed method must be performed within a single “wireless communication channel.” Again, “a wireless communication channel” appears before “comprising,” and therefore does not appear after an open-ended limitation. Second, the plain meaning requires that the method be performed within a single “wireless communication channel.” Finally, the specification repeatedly explains that the invention is directed at performing the claimed method in a single wireless communication channel. Ex. 1 (’802 Patent) 1:61-63, 2:45-47; 6:60-62; 10:63-66; 12:14-15. And this is confirmed by the fact that, for example, the

specification recites specific mathematical methods to recover information based on the responses of the different frequency ranges within a single communication channel. Ex. 1 ('802 Patent) 13:21-23.

Therefore, claim 1 requires that the claimed method be performed within a single “wireless communication channel.”

B. “first center frequency / second center frequency” (claim 1)

Plaintiff's Proposed Construction	Defendants' Proposed Construction
The frequency of the carrier that the baseband signal is upconverted to	Plain and ordinary meaning

The phrases “first center frequency” and “second center frequency” should be construed to mean “The frequency of the carrier that the baseband signal is upconverted to.” This interpretation is consistent with the usage of the term “center frequency” throughout the '802 patent, which refers to the carrier center frequency resulting from up-conversion of a baseband signal. A baseband signal represents the data to be transmitted in its raw form. For various known reasons, the baseband signal cannot be wirelessly transmitted in its existing form and must be “up-converted” with a much higher frequency signal called a “carrier signal.” Additionally, the '802 patent mentions “center frequency” more than 90 times, including in its background of the invention and in every embodiment. It repeatedly, consistently and exclusively uses “center frequency” to mean the frequency of the carrier signal to which the baseband signal is up-converted. Thus, the claims' requirement of two “center frequenc[ies],” one greater than the other, means that there has to be two up-conversions to two different carrier signals with two frequencies, one greater than the other.

The claims require transmitting data across two frequency ranges, each with its own “center frequency,” with one center frequency “greater than” the other. The '802's specification confirms that the claimed “center frequency” refers to the carrier signal frequency the baseband signal is

upconverted to. Therefore, to have two, different “center frequencies,” there must be two up-conversions to two carrier signals with different frequencies.

Understanding what a “center frequency” is, however, requires a brief discussion of the underlying technology. Per Professor Cooklev:

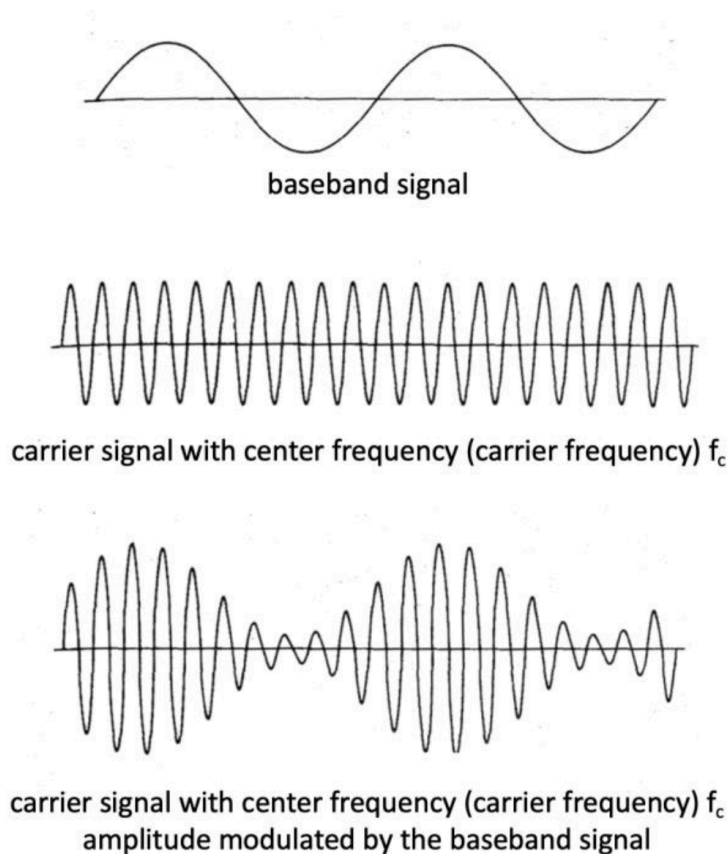
A baseband signal represents the information to be transmitted in its raw form. It can be either an analog electrical waveform (e.g., voice) or a digital signal. Baseband signals generally include frequencies that are very low and close to zero. However, antennas cannot emit zero-frequency signals and are ineffective when the frequency is low. Therefore, the frequency of many baseband signals is too low for them to be effectively or feasibly transmitted over a wireless system. As another issue, frequency ranges are typically assigned (e.g., by a governmental regulatory body) such that baseband frequencies are not available for use.

Therefore, the baseband signal often cannot be transmitted wirelessly. It would instead have to be modulated on a signal at a much higher frequency prior to transmission. This higher frequency signal is called a carrier signal. In such instances, the baseband signal is said to be “up-converted” to the carrier signal’s higher frequency. As I will explain later in my declaration, the “center frequency” is the carrier signal frequency to which the baseband signal is up-converted prior to transmission.

The distinction between a baseband signal and a “center frequency” (interchangeably referred to in the ’802 as a carrier frequency) to which the baseband signal is up-converted is shown in the figure below. The top image shows a baseband signal with a low frequency². The middle image shows the carrier signal with a much higher “center frequency” f_c . In practice this carrier signal is generated by a local oscillator (LO). The third image shows the carrier signal after it has been

² For ease of illustration, the shown signal is real-valued, even though baseband signals are generally complex-valued. Ex. 2 (Cooklev Decl.) ¶ 41 n.1.

amplitude modulated by the baseband signal. This modulated carrier signal is what would be transmitted out of the transmitter.



Ex. 2 (Cooklev Decl.) ¶¶ 39-41.

As Professor Cooklev explains, from the outset, the '802 patent makes clear that a “center frequency” is the carrier signal frequency the baseband signal is upconverted to:

The '802 patent mentions “center frequency” more than 90 times, including in its background of the invention and in all of its embodiments. Every time it is used, it means the frequency of the carrier signal to which the baseband signal is upconverted. In the background of the invention, the '802 patent explains that the baseband signal is “up-convert[ed]” to the frequency of the “local oscillator (LO)”. [*'802 Patent*] 1:25-27. The output of this up- conversion is amplified and transmitted through the antenna. *Id.*, 27- 30. The '802 patent then explains that its prior art Figure 1 transmitter was “limited to up-converting a [baseband] signal to one center frequency (or modulation frequency), which is the LO frequency.” *Id.*,

1:30-32. Thus, from the very outset of its disclosure, the '802 patent uses “center frequency” as the carrier signal frequency the baseband signal upconverted to.

Ex. 2 (Cooklev Decl.) ¶¶ 42-43.

And, per Professor Cooklev, “center frequencies, ” and more specifically, the limited use of a single center frequency (or carrier frequency) is a focal point of the background of the invention:

In light of the background discussion in the '802 patent, the use of two “center frequencies” as claimed is a major focus of the invention. The '802 patent explains that in the prior art the '802 patent sought to improve upon, baseband signals were upconverted to a single carrier frequency and, thus, the amount of information that could be transmitted was limited by the bandwidth around that single up-conversion frequency. ['802 Patent] 1:32-35. To maximize throughput, the prior art increased the bandwidth around the single up-conversion frequency. [*Id.*] 1:25-32.

Ex. 2 (Cooklev Decl.) ¶ 44.

The '802 patent, in this regard, sought to improve upon the prior art by introducing two different center frequencies, a focal point of the claimed inventions reflected in every embodiment of the patent. Per Professor Cooklev:

In contrast to the prior art, which sought to improve throughput by increasing bandwidth around a single center frequency, the '802 patent increases throughput in an altogether different fashion. It increases throughput by, *inter alia*, disclosing up-conversion to two, different, center frequencies (rather than just one). By utilizing two, different, center frequencies, the bandwidth can effectively be increased by aggregating the capacities of two different communication channels together.

In accord with this insight, every embodiment of the '802 patent similarly uses “center frequency” to mean the carrier signal frequency the baseband signal is upconverted to. For example, Figure 2, annotated below, is illustrative:

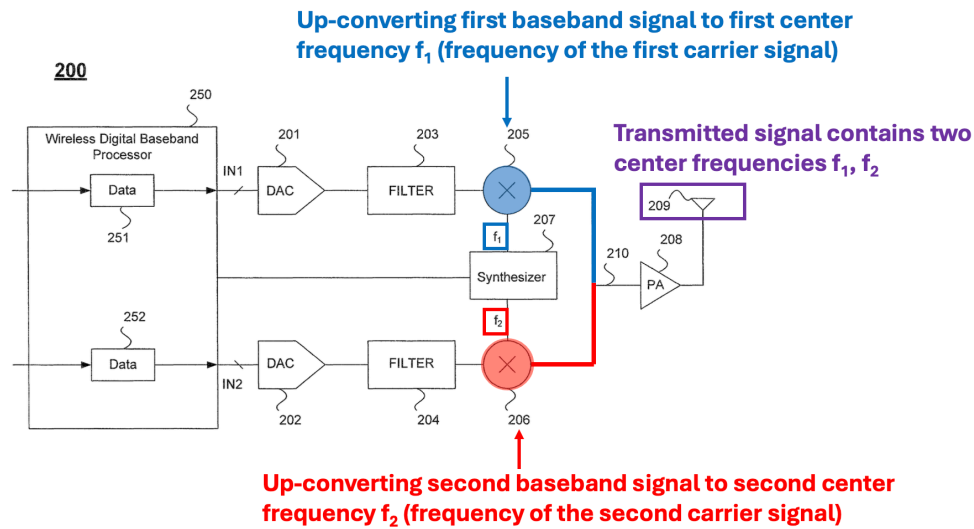


Fig. 2

Figure 2 discloses a wireless digital baseband processor 250 that provides data via two separate digital baseband signals 251 and 252. [*'802 Patent*] 5:60-66. After being converted to analog in DAC 201/202 and filtered, signals 251 and 252 are fed into respective up-converters 205 and 206. Up-converter 205 accordingly upconverts data 251 into a first “center frequency” f_1 and, similarly, data 252 is upconverted by element 206 into a second “center frequency” f_2 . *Id.*, 6:22-56. These two up-converted signals are then combined, amplified and transmitted. *Id.*, 7:4-14. Thus, the *'802 patent* uses “center frequencies” f_1 and f_2 to mean the carrier signal frequencies the two baseband signals 251 and 252 are upconverted to.

The resulting signal is shown schematically in the annotated version of the *'802 patent's* Figure 3. The blue region shows the baseband signal upconverted to the first carrier signal with a first center frequency f_1 . The red region shows the baseband signal upconverted to the second carrier signal with a second center frequency f_2 .

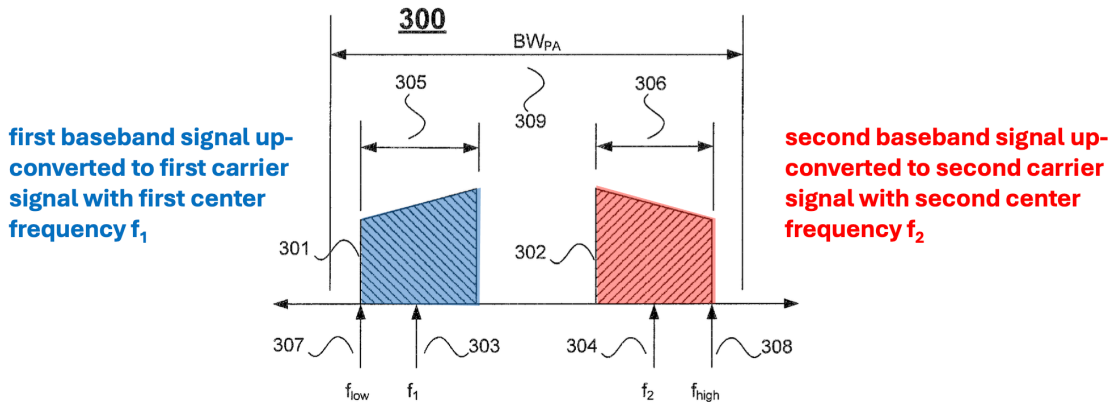


Fig. 3

This very same meaning of “center frequency” as the carrier frequency the baseband signal is upconverted to is reflected in the ’802 patent’s other embodiments as well. *See, e.g.*, [’802 Patent] 9:9-57 (Figure 6 embodiment); 12:33-58 (Figure 10 embodiment).

Ex. 2 (Cooklev Decl.) ¶¶ 45-49.

Additionally, the ’802 Patent uses the terms “center frequency” and “carrier frequency” interchangeably, further reinforcing that “center frequency” means the carrier signal frequency the baseband signal is up-converted to.³ For example, in connection with its Figure 8 embodiment, the ’802 Patent explains:

This example provides a transmitter for sending the same data across a communication channel at *two different RF carrier frequencies* to improve reliability and/or increase the range of the system. ... Up-converter 812 includes a

³ As the Federal Circuit has recognized, a patent may use different terms interchangeably to mean the same thing. *See Baran v. Med. Device Techs., Inc.*, 616 F.3d 1309, 1316 (Fed. Cir. 2010) (internal citations omitted) (finding “detachable” and “releasably” to have the same meaning); *VirnetX, Inc. v. Cisco Sys., Inc.*, 767 F.3d 1308, 1317-1319 (Fed. Cir. 2014) (reversing broad construction of “secure communication link” in part because “the specification appear[ed] to use the terms ‘secure communication link’ and ‘VPN’ interchangeably, suggesting that the inventors intended the disputed term to encompass the anonymity provided by a VPN” and no “embodiment or disclosure” “expressly divorc[ed] those terms”); *see also Haddad v. United States*, 164 Fed. Cl. 28, 66 (2023) (finding that the patent used “authenticity risk rating,” “authentication rating,” and “ID forgery risks rating” interchangeably).

second input coupled to an output of a synthesizer 814, which may be used *to up-convert the analog signal to a RF center frequency f_1* . Similarly, up-converter 813 includes a second input coupled to another output of a synthesizer 814 (or to a different synthesizer), which may be used to *up-convert the analog signal to a RF center frequency f_2* The output of power amplifier 815 is coupled to antenna 850 to *transmit the digital data simultaneously as an electromagnetic signal using two different RF carrier frequencies*.

Ex. 1 ('802 Patent) at 10:64-11:20. As Professor Cooklev explains:

As can be seen, here, the '802 patent is using “center frequency” and “carrier frequency” interchangeably. Specifically, the '802 patent explains that it obtains a signal with two different “carrier frequencies” through combining signals that are separately up-converted to “center frequencies” f_1 and f_2 . “Carrier frequency” is a term of art and, like “center frequency” in the '802 patent, refers to the carrier signal frequency the baseband signal is upconverted to.

Ex. 2 (Cooklev Decl.) ¶ 51.

In sum, and in accord with the '802 patent's consistent usage, the Court should construe “center frequency” to mean the carrier signal frequency the baseband signal is upconverted to. *Phillips v. AWH Corp.*, 415 F.3d 1303, 1315 (Fed. Cir. 2005) (“the specification is always highly relevant to the claim construction analysis. Usually, it is dispositive; it is the single best guide to the meaning of a disputed term.”) (internal quotation and citation omitted); *Medrad, Inc. v. MRI Devices Corp.*, 401 F.3d 1313, 1319 (Fed. Cir. 2005) (“We cannot look at the ordinary meaning of the term . . . in a vacuum. Rather, we must look at the ordinary meaning in the context of the written description and the prosecution history.”) (citation omitted); *Kinetic Concepts, Inc. v. Blue Sky Med. Grp., Inc.*, 554 F.3d 1010, 1018-19 (Fed. Cir. 2009) (limiting “wound” to “skin wounds” where “[a]ll of the examples described in the specification involve skin wounds”); *VirnetX, Inc. v. Cisco Sys.*, 767 F.3d 1308, 1317, 1317-1319 (Fed. Cir. 2014) (reversing construction of “secure

communication link” that did not require anonymity, where “the specification appear[ed] to use the terms ‘secure communication link’ and ‘VPN’ interchangeably, suggesting that the inventors intended the disputed term to encompass the anonymity provided by a VPN” and no embodiments or disclosure “expressly divorc[ed]” the two terms); *Wisconsin A* (limiting “prediction” to dynamic prediction where all embodiments describe dynamic prediction and allowing the term to cover static prediction “would ‘expand the scope of the claims far beyond anything described in the specification’”); *Choon’s Design, LLC v. IdeaVillage Prods. Corp.*, 776 Fed App’x 691, 695-96 (Fed. Cir. 2019) (construing “at least one pin bar” to extend only to detachable pin bars, where “the specification discloses only loom kits having detachable bases and pin bars”).

In re Abbott is particularly instructive. *In re Abbott Diabetes Care Inc.*, 696 F.3d 1142 (Fed. Cir. 2012). There, the Patent and Trademark Office had construed “electrochemical sensor” under its plain meaning to include wired connections. *Id.* at 1146. The Federal Circuit reversed, explaining:

Even more to the point, ***every embodiment disclosed in the specification shows an electrochemical sensor without external cables or wires.*** Indeed, the only mention of a sensor with external cables or wires in Abbott’s patents is a single statement addressing the primary deficiency of the prior art. It is true that the specification does not contain an explicit statement disclaiming electrochemical sensors with external cables or wires. We have held that “[e]ven when guidance is not provided in explicit definitional format, the specification may define claim terms by implication such that the meaning may be found in or ascertained by a reading of the patent documents.” *Irdeto Access, Inc. v. Echostar Satellite Corp.*, 383 F.3d 1295, 1300 (Fed. Cir. 2004) (internal quotation marks omitted). ***Here, Abbott’s patents “repeatedly, consistently, and exclusively” depict an electrochemical sensor without external cables or wires while simultaneously disparaging sensors with external cables or wires.*** *Id.* at 1303.

Id., 1149-1150. Similar to *In Re Abbott*, the '802 patent “repeatedly, consistently, and exclusively” uses “center frequency” is in every embodiment to mean the carrier frequency the baseband signal is upconverted to.

For the foregoing reasons, the Court should give “center frequency” its plain and ordinary meaning of in light of the patent specification: the carrier signal frequency the baseband signal is up-converted to.

Dated: September 26, 2024

Respectfully submitted,

/s/ Reza Mirzaie

Marc Fenster
CA State Bar No. 181067
Reza Mirzaie
CA State Bar No. 246953
Neil A. Rubin
CA State Bar No. 250761
Amy E. Hayden
CA State Bar No. 287026
James Pickens
CA State Bar No. 307474
Christian W. Conkle
CA State Bar No. 306374
Jonathan Ma
CA State Bar No. 312773
RUSS AUGUST & KABAT
12424 Wilshire Blvd. 12th Floor
Los Angeles, CA 90025
Telephone: 310-826-7474
rak_cobblestone@raklaw.com

Andrea Fair
Ward Smith & Hill, PLLC
1507 Bill Owens Parkway
Longview, Texas 75604
(903) 757-6400
andrea@wsfirm.com

***Attorneys for Plaintiff,
Cobblestone Wireless, LLC***

CERTIFICATE OF SERVICE

I certify that this document is being served upon counsel of record for Defendants on September 26, 2024 via CM/ECF.

/s/ Christian W. Conkle